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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/495,036	01/31/2000	Ruibing Hao	1-2-10-3	4280

7590 12/03/2003	EXAMINER
John E. Curtin, Esq. Troutman Sanders	PHILPOTT, JUSTIN M

ART UNIT	PAPER NUMBER
2665	

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DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/495,036	HAO ET AL.
	Examiner	Art Unit	
	Justin M Philpott	2665	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 September 2003</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-10* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

DETAILED ACTION

Response to Amendment

1.   In the Amendment filed September 4, 2003, Applicant has amended the specification and

has argued that the pending claims should be allowed. In view of the amendment, the

specification is no longer objected to.

Response to Arguments

2.   Applicant's arguments filed September 4, 2003 have been fully considered but they are

not persuasive.

First, Applicant argues (page 4, first paragraph) that Uyar fails to disclose the operational

state pertains to a first operation and a second operation as recited in claim 3. However, Uyar

clearly teaches a first operation (e.g., sending $input_j$ by user A) and a second operation (e.g.,

receiving $output_j$ by user B) are performed in the operational state (e.g., $STATE_j$, see FIG. 4).

Thus, Uyar teaches the operational state pertains to a first operation and a second operation as

recited in claim 3.

Further, Applicant argues (page 4, second paragraph) that the teachings of Uyar cannot

be adapted to perform an operational state pertaining to a first operation of a first gateway and a

second operation of a second gateway because Applicant claims that Uyar teaches the testing of

only one multi-user system, in view of col. 7, lines 30-36. However, Uyar discloses the testing

of a plurality of multi-user systems (e.g., see col. 2, lines 45-49; col. 11, lines 33-40; and col. 11,

lines 50-58, all regarding "multi-user systems") and further teaches that each tester is in fact a

"system" (e.g., see col. 10, lines 14-16). Also, Uyar teaches coordinated messages are exchanged between each tester system and, specifically, the invention is distinguished from the prior art by using multiple tester systems as opposed to a system with a single tester coupled to standard equipment (e.g., see col. 9, line 49 – col. 10, line 19). Thus, Uyar clearly teaches testing a first and second operation of a first and second system, respectively.

Claim Rejections - 35 USC § 103

3.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4.   Claims 3-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Application Publication No. 0 421 652 A2 to Uyar.

Regarding claim 3, Uyar teaches a method (e.g., see col. 2, line 46 – col. 3, line 20) of generating a set of test sequences (col. 3, lines 1-5) for evaluating interoperability of a number of interconnected communication systems (e.g., multi-user systems, col. 2, line 48) with respect to a desired mode of communication between a first end user and a second end user, the method comprising: determining a number of operational states that are required of the communication system to implement the desired mode of operation between the first and the second end users (e.g., see col. 5, line 58 – col. 6, line 31), wherein each operational state (e.g., $STATE_j$, see FIG. 3) pertains to a first operation of a first system associated with the first end user (e.g., TEST $STEP_i$, wherein a first tester/user A sends $input_j$, see FIG. 4; see also col. 4, lines 54-56 wherein the term tester is synonymous with user) and a corresponding second operation of a second system associated with the second end user (e.g., TEST $STEP_i$, wherein a second tester/user B

receives output$_j$, see FIG. 4); and testing the interconnected communication systems by causing

the systems to perform specified transitions between pairs of at least some of the operational

states (e.g., from STATE$_j$ to STATE$_k$). While Uyar may not specifically disclose that the first

and second systems are gateway systems, Uyar discloses the invention is applicable for, e.g.,

systems running at different speeds independent of each other and including a wide class of

implementations that bring services to more than one user via such diverse systems as digital

communication switches, PBXs, implementations of high-layer communication protocols, and

VLSI systems (e.g., see col. 1, lines 10-15 and col. 11, lines 40-47), thus suggesting applicability

to gateway systems. Thus, at the time of the invention it would have been obvious to one of

ordinary skill in the art to apply the teachings of Uyar to gateway systems as suggested by Uyar

by teaching the invention is applicable to the above-mentioned wide class of implementations.

Regarding claims 4 and 8, while Uyar may not specifically disclose one of the systems is

in the form of an Internet protocol network to which first and/or second systems are coupled,

Uyar discloses the invention is applicable to a wide class of implementations as discussed above

regarding claim 3 (e.g., see col. 1, lines 10-15 and col. 11, lines 40-47), and Examiner takes

official notice that systems in the form of an Internet protocol network are well known in the art.

Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to

apply the teachings of Uyar with a system in the form of an Internet protocol network as known

in the art in view of Uyar teaching the invention is applicable to the above-mentioned wide class

of implementations.

Regarding claims 5 and 9, Uyar teaches providing at least one of the communication

systems in the form of a switched telephone network by considering applications for a

telecommunication switch (col. 1, line 27) and teaching the invention is applicable to communication switches and PBXs (col. 11, line 45).

Regarding claim 6, Uyar clearly suggests selecting the desired mode of communication as voice communication by specifically considering applications for voice communications (col. 1, lines 25-36).

Regarding claim 7, Uyar teaches the determining step includes defining a finite state machine (see FIG. 1 and col. 3, lines 41 – col. 4, line 21) having vertices corresponding to the operational states and having edges between the vertices corresponding to the specified transitions.

Regarding claim 10, while Uyar may not specifically disclose eliminating from the testing step operations concerning only the first system and first end user and operations concerning only the second system and second user, Uyar does teach specifically detecting the operations concerning both first and second systems and end users (e.g., test sequences where coordination among testers is needed, see col. 6, lines 3-8). By distinguishing the operations concerning plural systems/users from the operations concerning only one system/user, and by teaching an invention centralized on coordinated testing (cols. 4-12) concerning plural systems/users, Uyar anticipates eliminating from the testing step operations concerning only one system/user.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Justin M Philpott whose telephone number is 703.305.7357. The

examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Huy D Vu can be reached on 703.308.6602. The fax phone number for the

organization where this application or proceeding is assigned is 703.872.9314.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703.305.4750.

Justin M Philpott

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600